Talcville Project

Certification Application to the Low Impact Hydropower Institute

FERC Project No. P-4402-NY

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APPENDICES

INTRODUCTION

Erie Boulevard Hydropower, LP (Erie), a subsidiary of Brookfield Renewable (Brookfield), is providing this application to the Low Impact Hydropower Institute (LIHI) for certification of the Talcville Project (Project). The Project is located on the Oswegatchie River in the Town of Edwards, St. Lawrence County, New York. The Federal Energy Regulatory Commission (FERC) issued a license exemption on June 6, 1983 for this Project (Project No. P-4402). On November 6, 1995, FERC issued an order amending the exemption.

PART I. FACILITY INFORMATION TABLE

The Talcville Project consist of: (1) the Talcville Dam, an integrated concrete gravity structure, 14 feet long and 13 feet high, having an 80-foot-long spillway section; (2) 2-foot-high flashboards; (3) a reservoir having a surface area of 36 acres and a maximum surface elevation of 633 feet m.s.l.; (4) a 70-foot-long, 16-foot-wide, 13-foot-high flume; (5) a powerhouse containing one generating unit with a rated capacity of 824 kW, but capable of generating 896 kW under optimal conditions, having a hydraulic capacity in the range of 670 to 700 cfs; (6) a 100-kW minimum flow unit installed in the intake works, having a hydraulic capacity of 85 cfs; (7) a 1.5-MW, 23,000-volt substation; and (8) appurtenant facilities (FERC 1995). The key features of the Talcville Project are described in Table I-1.

Table I-1. Facility Description Information for the Talcville Project.

Item	***Information Requested***	***Response (include references to further details)***
Name of the Facility	Facility name (use FERC project name or other legal name)	Talcville Project (FERC No. 4402)
Reason for applying for LIHI Certification	1. To participate in state RPS program 2. To participate in voluntary REC market (e.g., Green-e) 3. To satisfy a direct energy buyer's purchasing requirement 4. To satisfy the facility's own corporate sustainability goals 5. For the facility's corporate marketing purposes 6. Other (describe)	To satisfy the facility's own corporate sustainability goals.
	If applicable, amount of annual generation (MWh and % of total generation) for which RECs are currently received or are expected to be received upon LIHI Certification	N/A
Location	River name (USGS proper name)	Oswegatchie River

Item	*Information Requested*	*Response (include references to further details)*
	Watershed name - Select region, click on the area of interest until the 8-digit HUC number appears. Then identify watershed name and HUC-8 number from the map at: https://water.usgs.gov/wsc/map_index.html	Oswegatchie – HUC 04150302
	Nearest town(s), county(ies), and state(s) to dam	Town of Edwards, St. Lawrence County, New York
	River mile of dam above mouth	75.5
	Geographic latitude and longitude of dam	Lat: 44°18'30.46"N Long: 75°18'29.52"W
Facility Owner	Application contact names	Timothy Parker Compliance Manager, NY and MN Brookfield Renewable See Part V of the LIHI certification application for more information.
	Facility owner company and authorized owner representative name. **For recertifications: If ownership has changed since last certification, provide the effective date of the change.**	Same as above
	FERC licensee company name (if different from owner)	Erie Boulevard Hydropower, L.P.,
Regulatory Status	FERC Project Number (e.g., P-xxxxx), issuance and expiration dates, or date of exemption	FERC Project Number 4402 Exemption date: June 6, 1983 Exemption amendment: November 6, 1995
	FERC license type (major, minor, exemption) or special classification (e.g., "qualified conduit", "non-jurisdictional")	Exemption from Licensing of a Small Hydroelectric Project of 5 Megawatts or Less
	Water Quality Certificate identifier, issuance date, and issuing agency name. Include information on amendments.	In a letter filed with the FERC on May 10, 1983 (dated May 5, 1983), the New York State Department of Environmental Conservation (NYSDEC) issued the Water Quality Certificate for the Talcville Project (see Appendix D for consultation and Water Quality Certificate).

Item	*Information Requested*	*Response (include references to further details)*
	Hyperlinks to key electronic records on FERC e-Library website or other publicly accessible data repositories[1]	June 16, 1983 Order Granting Exemption from Licensing https://elibrary.ferc.gov/eLibrary/filelist?accession_number=19830617-0088 May 5, 1983 Comments of NYSDEC on Exemption (See Appendix D) November 6, 1995 Order Amending Exemption: https://elibrary.ferc.gov/eLibrary/filelist?accession_number=19951115-0195
Powerhouse	Date of initial operation (past or future for pre-operational applications)	The project dam site and structures were constructed around 1880 as an electrical and mechanical power source for mining operations by the Governor Talc Company. In 1972, the dam was partially breached by its owners, and was presumably non-functional. In the mid-1980s, the Project was redeveloped at the breached Talcville Dam, including renovation of an existing 100 KW generator and replacement of a second generator with new unit rated at 824 KW.
	Total installed capacity (MW) **For recertifications: Indicate if installed capacity has changed since last certification**	924 KW
	Average annual generation (MWh) and period of record used **For recertifications: Indicate if average annual generation has changed since last certification**	2,685 MWh average annual from 2004 to 2023

[1] For example, the FERC license or exemption, recent FERC Orders, Water Quality Certificates, Endangered Species Act documents, Special Use Permits from the U.S. Forest Service, 3rd-party agreements about water or land management, grants of right-of-way, U.S. Army Corps of Engineers permits, and other regulatory documents. If extensive, the list of hyperlinks can be provided separately in the application.

Item	*Information Requested*	*Response (include references to further details)*
	Mode of operation (run-of-river, peaking, pulsing, seasonal storage, diversion, etc.) **For recertifications: Indicate if mode of operation has changed since last certification**	Brookfield currently operates the project in run-of-river mode.
	Number, type, and size of turbine/generators, including maximum and minimum hydraulic capacity and maximum and minimum output of each turbine and generator unit	**Generating Units:** 2 **Type:** **Unit 1:** ESAC 4 Blade Kaplan Turbine and Jaumont Scheider Generator (825 kW) **Min Flow Unit:** Flygt 4 Blade Propeller Blade type C Turbine and Flygt Generator (100 kW) **Description:** **Unit 1:** Turbine rated at 1,240 hp at a flow of 611cfs. 196 rpm, and 18.3 feet of net head. **Min Flow Unit:** Turbine rated at 134 hp at a flow of 80 cfs, 525 rpm, and 14-17 feet of net head. **Maximum Hydraulic Capacity:** 700 cfs (Unit 1) and 85 cfs (Min Flow Unit)
	Trashrack clear spacing (inches) for each trashrack	2 inch clear spacing
	Approach water velocity (ft/s) at each intake if known	Unknown
	Dates and types of major equipment upgrades **For recertifications: Indicate only those since last certification**	**1983**: A turbine was installed with a rated capacity of 824 kW and capability to generate 896 kW under optimal generating conditions. A minimum flow unit rated at 100 kW was installed in the Project's intake works.
	Dates, purpose, and type of any recent operational changes **For recertifications: Indicate only those since last certification**	N/A
	Plans, authorization, and regulatory activities for any facility upgrades or license or exemption amendments	November 6, 1995: Order amending Niagara Mohawk Power Corp exemption for Talcville Project (P-4404).
Dam or Diversion	Date of original dam or diversion construction and description and dates of subsequent dam or diversion structure modifications	Original dam was constructed in 1880 and breached in 1973; circa 1983 Talcville dam reconstructed on breached dam.

Item	*Information Requested*	*Response (include references to further details)*
	Dam or diversion structure length, height including separately the height of any flashboards, inflatable dams, etc. and describe seasonal operation of flashboards and the like	Integrated concrete gravity structure which is 14 feet long and 13 feet high, having an 80-foot-long spillway section.
	Spillway maximum hydraulic capacity	1,770 cfs (635 feet, top of left abutment)
	Length and type of each penstock and water conveyance structure between the impoundment and powerhouse	Flume: 135 feet long, 16 feet wide and 13 feet high.
	Designated facility purposes (e.g., power, navigation, flood control, water supply, etc.)	The purpose of the Project is for power generation.
Conduit Facilities Only	Date of conduit construction and primary purpose of conduit	The flume existed prior to reconstruction of the dam.
	Source water	Oswegatchie River
	Receiving water and location of discharge	Tailrace on the Oswegatchie River
Impoundment and Watershed	Authorized maximum and minimum impoundment water surface elevations **For recertifications: Indicate if these values have changed since last certification**	Maximum 632.4 ft (flashboards installed) Minimum 630.4 ft (flashboards removed)
	Normal operating elevations and normal fluctuation range **For recertifications: Indicate if these values have changed since last certification**	Maximum 632.4 ft (flashboards installed) Minimum 630.4 ft (flashboards removed)
	Gross storage volume and surface area at full pool **For recertifications: Indicate if these values have changed since last certification**	Normal volume: 250 acre-feet at 630.4 feet) Surface area: 32 acres
	Usable storage volume and surface area **For recertifications: Indicate if these values have changed since last certification**	There is no usable storage capacity in the impoundment due to run-of-river operations.
	Describe requirements related to impoundment inflow and outflow, elevation restrictions (e.g., fluctuation limits, seasonality) up/down ramping and refill rate restrictions.	The Talcville Project operates in run-of-river mode with minimum flow requirement of 100 cfs immediately downstream of the dam.

Item	*Information Requested*	*Response (include references to further details)*
	Upstream dams by name, ownership (including if owned by an affiliate of the applicant's company) and river mile. If FERC licensed or exempt, please provide FERC Project number of these dams. Indicate which upstream dams have downstream fish passage.	Cranberry Lake Dam at Cranberry Lake Project, P-9685, Ampersand Cranberry Lake Hydro LLC (surrendered license in 2023), RM 108.8 Upper Newton Falls Development, Erie Boulevard Hydropower, LP, P-7000, RM 99.6 Lower Newton Falls Development, Erie Boulevard Hydropower, LP, P-7000, RM 99.1 Browns Falls Development, Erie Boulevard Hydropower, P-2713, RM 96.9 Flat Rock Development, Erie Boulevard Hydropower, P-2713, RM 94.1 South Edwards Development, Erie Boulevard Hydropower, P-2713, RM 87.1 Oswegatchie Development, Erie Boulevard Hydropower, P-2713, RM 86.6 * Downstream fish passage is provided at Upper Newton and Lower Newton developments.

Item	*Information Requested*	*Response (include references to further details)*
	Downstream dams by name, ownership (including if owned by an affiliate of the applicant's company), river mile and FERC number if FERC licensed or exempt. Indicate which downstream dams have upstream fish passage	Emeryville Project, Hampshire Paper Company, P-2850, RM 72.3 Fowler No. 7 Project, Hydro Development Group, P-6059, RM 69 Hailesboro No. 6 Project, Hydro Development Group, P-3181, RM 68.2 Hailesboro No. 4 Project, Hydro Development Group, p-5633, RM 67.1 Village of Gouverneur Project, Village of Gouverneur, P-7155, RM 64.4 Natural Dam Project, Cell Tissue Corporation, P-2851, RM 62.4 Heuvelton Development, Erie Boulevard Hydropower, LP, P-2713, RM 12 Eel Weir Development, Erie Boulevard Hydropower, LP, P-2713, RM 5.1 Ogdensburg Project, Ampersand Ogdensburg Hydro, P-9821, RM 0.9 * Upstream fish passage is provided at the Heuvelton and Eel Weir developments.
	Operating agreements with upstream or downstream facilities that affect water availability and facility operation	The Oswegatchie River at Talcville is managed as a mixed cool water / warm water fishery. The NYSDEC reserves the right to require flow modifications and other alterations in operating mode to make the Talcville Project compatible with any future adjustments in flows resulting from operational change at the several Brookfield facilities (P-2713) located upstream. Brookfield will operate Talcville in a manner that will not contravene the established regulations of the 401 Water Quality Certificate for the upstream P-2713 Brookfield facilities.
	Area of land (acres) and area of water (acres) inside FERC project boundary or under facility control. Indicate locations and acres of flowage rights versus fee-owned property.	The dam impounds a 36-acre reservoir.

Item	*Information Requested*	*Response (include references to further details)*
Hydrologic Setting	Average annual flow at the dam, and period of record used	The approximately average annual flow at the Talcville Project based on flow data from 2014 through 2024 at the USGS gage 04262000 Oswegatchie River near Oswegatchie, NY is 607 cfs.
	Average monthly flows and period of record used	The approximate average monthly flows at the Talcville Project based on flow data from 2014 through 2024 at the USGS gage 04262000 Oswegatchie River near Oswegatchie, NY are as follows: January – 766 cfs February – 573 cfs March – 772 cfs April – 936 cfs May – 663 cfs June – 574 cfs July – 416 cfs August – 379 cfs September – 250 cfs October – 451 cfs November – 705 cfs December – 762 cfs
	Location and name of closest stream gaging stations above and below the facility	Downstream: USGS Gage No. 04263000 Oswegatchie River near Heuvelton, NY (located approximately 63.5 river miles downstream of the Talcville Project), RM 12.0 Upstream: USGS Gage No 04262000 Oswegatchie River near Oswegatchie, NY (located approximately 20.0 river miles upstream of the Talcville Project), RM 95.5
	Watershed area at the dam (in square miles). Identify if this value is prorated from gage locations and provide the basis for proration calculation.	309 square miles
	Other facility specific hydrologic information (e.g., average hydrograph)	N/A
Designated Zones of Effect	Numbers and names of each zone of effect (e.g., "Zone 1: Impoundment")	Zone 1: Impoundment Zone 2: Bypass Reach Zone 3: Tailwater and Downstream
	River mile of upstream and downstream limits of each zone of effect (e.g., "Zone 1 Impoundment: RM 6.3 - 5.1")	Zone 1: 75.50 to 76.25 Zone 2: 75.50 to 75.45 Zone 3: 75.50 to 75.40
Pre-Operational Facilities Only		

Item	*Information Requested*	*Response (include references to further details)*
Expected operational date	Date generation is expected to begin	N/A
Dam, diversion structure or conduit modification	Description of modifications made to a pre-existing conduit, dam or diversion structure needed to accommodate facility generation. This includes installation of flashboards or raising the flashboard height. Date the modification is expected to be completed	N/A
Change in water flow regime	Description of any change in impoundment levels, water flows or operations required for new generation	N/A

PART II. STANDARD MATRICES

The Talcville Project has a total of three zones of effect that are defined as: (1) Zone one, which extends from Talcville Dam upstream approximately 0.75 miles, (2) Zone two, which extends from the dam downstream approximately 250 feet, and (3) Zone three, which extends from the powerhouse downstream approximately 250 feet.

The standards selected to satisfy the LIHI certification criteria in each of these zones are identified in the following tables.

Table II-1. LIHI Standards Selected for Zone of Effect No. 1 for the Talcville Project

Criterion		*Alternative Standards (check one numbered box and PLUS if applicable)*				
		1	*2*	*3*	*4*	*Plus*
A	**Ecological Flow Regimes**	X				
B	**Water Quality**		X			
C	**Upstream Fish Passage**	X				
D	**Downstream Fish Passage**	X				
E	**Watershed and Shoreline Protection**	X				
F	**Threatened and Endangered Species Protection**			X		
G	**Cultural and Historic Resources Protection**	X				
H	**Recreational Resources**	X				

Table II-2. LIHI Standards Selected for Zone of Effect No. 2 for the Talcville Project

Criterion		*Alternative Standards (check one numbered box and PLUS if applicable)*				
		1	*2*	*3*	*4*	*Plus*
A	**Ecological Flow Regimes**		X			
B	**Water Quality**		X			
C	**Upstream Fish Passage**	X				
D	**Downstream Fish Passage**	X				
E	**Watershed and Shoreline Protection**	X				
F	**Threatened and Endangered Species Protection**			X		
G	**Cultural and Historic Resources Protection**	X				
H	**Recreational Resources**	X				

Table II-3. LIHI Standards Selected for Zone of Effect No. 3 for the Talcville Project

Criterion		*Alternative Standards (check one numbered box and PLUS if applicable)*				
		1	*2*	*3*	*4*	*Plus*
A	**Ecological Flow Regimes**	X				
B	**Water Quality**		X			
C	**Upstream Fish Passage**	X				
D	**Downstream Fish Passage**	X				
E	**Watershed and Shoreline Protection**	X				
F	**Threatened and Endangered Species Protection**			X		
G	**Cultural and Historic Resources Protection**	X				
H	**Recreational Resources**	X				

PART III. SUPPORTING INFORMATION: ALL CRITERIA STANDARDS TABLES AND REQUIREMENTS

This section contains information that explains and justifies the standards selected to pass the LIHI certification criteria (see Part II for selections).

TALCVILLE HYDROELECTRIC PROJECT

Information Required to Support Ecological Flows Standards

Table III.A.1 Ecological Flows: Talcville Project Zone 1

Criterion	*Standard*	*Instructions*
A	1	Not Applicable / De Minimis Effect: • Confirm the location of the powerhouse relative to any dam/diversion structures and demonstrate that there are no bypassed reaches in the designated Zone of Effect. • For run-of-river facilities, provide details on operations and describe how flows, water levels, and operations are monitored to ensure such an operational mode is maintained. In a conduit facility, identify the source waters, location of discharge points, and receiving waters for the conduit system within which the hydropower facility is located. This standard cannot be used for conduits that discharge to a natural waterbody. • For impoundment zones, explain water management (e.g., fluctuations, ramping, refill rates, restrictions) and how those requirements support fish and wildlife habitat within the ZoE.

Zone 1 of the Talcville Project is the impoundment, and there are no bypassed reaches within the impoundment. The Project is operated in run-of-river mode, and the powerhouse is adjacent to and immediately to the south of the dam at the left abutment (looking downstream).

Run-of-river mode means that the instantaneous outflow from the impoundment, consisting of flow through the turbines, leakage and directed releases, including spillage, will equal the instantaneous inflow to the impoundment.

The 1983 Exemption Order, "requires compliance with any terms and conditions that Federal or State fish and wildlife agencies have determined appropriate to prevent loss of, or damage to, fish and wildlife resources."

The WQC issued by the NYSDEC, dated May 5, 1983, serves as one such letter, and is considered the prevailing Water Quality Certificate (WQC) to which the exemptee must adhere. On January 24, 2025, the NYSDEC verified the validity of the 1983 WQC for the Talcville Project Appendix D.

There are no specific operational requirements for the impoundment as none have been recommended by any resource agency and the Project operates in a run-of-river mode,

minimizing fluctuations in the impoundment. Erie maintains a transducer at the intake that in monitored 24/7 by Brookfield's National System Control Center.

The WQC states that the Oswegatchie River at Talcville is managed as a mixed cool water / warm water fishery. According to the WQC, species of particular interest include northern pike, smallmouth bass, bullheads, pickerel and yellow perch. In order to minimize adverse impacts to this fishery, both above and below the dam, as well as to the wildlife resources and habitats which may be influenced by operation of the project, the project operates in a run-of-river mode.

Additionally, Term #2(iii) of the WQC, dated May 5, 1983, states the NYSDEC:

> *reserves the right to require flow modifications and other alterations in operating mode to make the Talcville Project compatible with any future adjustments in flows resulting from operational change at the several [Erie facilities (P-2713)] located upstream As a condition to the issuance of a 401 Water Quality Certification for these [Erie] facilities by DEC on November 15, 1978, in conjunction with FERC Project #2713, studies have been required of [the Licensee] to determine the feasibility of providing minimum flows or seasonal flows in the Oswegatchie River for enhancement of fisheries, recreational uses, aesthetics and waste assimilative capacity. Subsequent modifications to flow regimes from the [Erie] facilities should be taken into account at all downstream hydropower facilities through concomitant beneficial flow changes, if warranted.*

The 401 WQC for the upstream Erie facilities (FERC Project #2713) dated November 15, 1978, was superseded by issuance of a new WQC on October 24, 2024. The condition of the new WQC for upstream Erie facility did not modify the requirements of the WQC for the Talcville Project.

There have been no deviation from run-of-river requirements in the last 10 years. Erie remains in compliance with the established flow conditions and impoundment levels and maintains records of these conditions at the Project. In the event of a deviation from established minimum flows or impoundment levels, Erie files documentation with FERC detailing the reasons for the deviation.

Table III.A.2 Ecological Flows: Talcville Project Zone 2

Criterion	*Standard*	*Instructions*
A	2	Agency Recommendation (see Appendix A for definition): • Identify the proceeding and source, date, and specifics of the agency recommendation applied (NOTE: there may be more than one; identify and explain which is most environmentally protective). • Explain the scientific or technical basis for the agency recommendation, including methods and data used. This is required regardless of whether the recommendation is or is not part of a Settlement Agreement. • Explain how the recommendation relates to formal agency management goals and objectives for fish and wildlife.

Criterion	*Standard*	*Instructions*
		• Explain how the recommendation provides fish and wildlife protection, mitigation, and enhancement (including instream flows, ramping, and peaking rate conditions, and seasonal and episodic instream flow variations).

Zone 2 of the Talcville Project is the bypassed reach.

Term #2(ii) of the WQC, dated May 5, 1983, states:

> *A spillage or release of 100 cfs will be required to preserve habitat and maintain water quality within the 195-foot shunted section of the stream. As an alternative, the applicant may operate with a spillage or release in this section of 60 cfs, provided at applicant's cost, studies are undertaken in consultation with the Department of Environmental Conservation to assess the possible need for additional flows to maintain habitat in the shunted section. Additional flows shall then be provided as indicated by such studies.*

Erie provides 85 cfs to the bypass reach via the minimum flow turbine with additional discharge through the sluice gate or over the spillway to preserve habitat and maintain water quality within the bypass reach.

Additionally, Term #2(iii) of the WQC, dated May 5, 1983, states the NYSDEC:

> *reserves the right to require flow modifications and other alterations in operating mode to make the Talcville Project compatible with any future adjustments in flows resulting from operational change at the several [Erie facilities (P-2713)] located upstream As a condition to the issuance of a 401 Water Quality Certification for these [Erie] facilities by DEC on November 15, 1978, in conjunction with FERC Project #2713, studies have been required of [the Licensee] to determine the feasibility of providing minimum flows or seasonal flows in the Oswegatchie River for enhancement of fisheries, recreational uses, aesthetics and waste assimilative capacity. Subsequent modifications to flow regimes from the [Erie] facilities should be taken into account at all downstream hydropower facilities through concomitant beneficial flow changes, if warranted.*

The 401 WQC for the upstream Erie facilities (FERC Project #2713) dated November 15, 1978, was superseded by issuance of a new WQC on October 24, 2024. The condition of the new WQC for upstream Erie facility did not modify the requirements of the WQC for the Talcville Project.

There have been no deviation from minimum flow requirements in the last 10 years. Erie remains in compliance with the established flow conditions and impoundment levels and maintains records of these conditions at the Project. In the event of a deviation from established minimum flows or impoundment levels, Erie files documentation with FERC detailing the reasons for the deviation.

Table III.A.3 Ecological Flows: Talcville Project Zone 3

Criterion	*Standard*	*Instructions*
A	1	Not Applicable / De Minimis Effect: • Confirm the location of the powerhouse relative to any dam/diversion structures and demonstrate that there are no bypassed reaches in the designated Zone of Effect. • For run-of-river facilities, provide details on operations and describe how flows, water levels, and operations are monitored to ensure such an operational mode is maintained. In a conduit facility, identify the source waters, location of discharge points, and receiving waters for the conduit system within which the hydropower facility is located. This standard cannot be used for conduits that discharge to a natural waterbody. • For impoundment zones, explain water management (e.g., fluctuations, ramping, refill rates, restrictions) and how those requirements support fish and wildlife habitat within the ZoE.

Zone 3 of the Talcville Project is the downstream area, and there are no bypassed reaches downstream of the powerhouse. The Project is operated in run-of-river mode, and the powerhouse is adjacent to and immediately to the south of the dam at the left abutment (looking downstream).

See response above for Zone 1.

Information Required to Support Water Quality Standards

Table III.B.1 Water Quality: Talcville Project Zone 1

Criterion	*Standard*	*Instructions*
B	2	Agency Recommandations: • Provide a copy of the most recent Water Quality Certificate and any subsequent amendments, including the date(s) of issuance. If more than 10 years old provide documentation that the certificate terms and conditions remain valid and in effect for the facility (e.g., a letter or e-mail from the agency). • Identify any other agency recommendations related to water quality and explain their scientific or technical basis • Describe all compliance activities related to water quality and any agency recommendations for the facility , including on-going monitoring, and how those are integrated into facility operations.

Zone 1 is the impoundment at the Project. Zone 1 is part of the segment of the Oswegatchie River with the segment ID 0905-0113 and Water Index Number SL-25 (portion 6) which includes the Oswegatchie river and select tributaries from Talcville to Newton Falls. The most recent NYSDEC information is found on the fact sheet dated December 18, 2024, where the NYSDEC has classified segment 0905-0113 as Class C. These waters are suitable for fish, shellfish and wildlife propagation and survival. Class C waters are also suitable for primary and secondary contact recreation.

The Clean Water Act (CWA) requires states to report the quality of their waters every two years to the Environmental Protection Agency. Section 303(b) of the CWA requires states to describe the quality of all waterbody segments in the state and report on whether their waters are supporting applicable best uses as sources of water supply, for primary and secondary contact recreation, and for the protection and support of fishing. Page 12 of the NYSDEC Section 303(b) Water Quality Report 2020/2022 indicates the water quality for the St. Lawrence drainage basin. The estimated average biological assessment profile (BAP) score in the St. Lawrence drainage basin is 7.1±0.7, indicating the rivers in the basin range from slightly impacted to natural water quality. The NYSDEC Water Quality Report 2020/2022 can be found at: https://dec.ny.gov/sites/default/files/2024-09/cleanwateractreport.pdf.

Section 303(d) of the CWA requires states to identify waters where water quality standards are not met and where uses are not supported. The Section 303(d) List is a list of impaired surface waters that do not meet water quality standards. Segment SL-25 (portion 6) is not listed in the Section 303(d) List of Impaired Surface Waters, therefore it meets water quality standards and supports best use of water resources. A copy of the New York State's most recent Section 303(d) List of Impaired Surface Waters can be found at: Final 2020/2022 NYS Section 303(d) List (.xlsx).

On May 5, 1983, NYSDEC issued the Water Quality Certification (WQC) for the Talcville Project in which NYSDEC supports the exemption from a FERC license. The WQC also states "no adverse impacts upon the water quality standards of the Oswegatchie River have been identified with this project." A copy of the WQC is included in Attachment D. On-going water quality monitoring at the Project is not required as part of the FERC Exemption Order or the WQC.

Term #3 of the WQC states:

> *No adverse impacts upon the water quality standards of the Oswegatchie River have been identified with this project. However, DEC reserves the right to require the applicant to implement temporary emergency procedures, if required, to assure the protection of the quality of the water and its biota. DEC also reserves the right to require the applicant to prepare studies, if necessary, to determine the need to abate, within reason, any future impacts upon the water resource that can be directly attributed to the existence and operation of the project.*

Additionally, the Applicant contacted the NYSDEC on January 23, 2025, regarding the current WQC status for the Project. By e-mail dated January 24, 2025, the NYSDEC indicated that the current 401 WQC is still valid for the Talcville Project. The consultation documentation regarding the 401 WQC is included in Appendix D.

Table III.B.2 Water Quality: Talcville Project Zone 2

Criterion	*Standard*	*Instructions*
B	2	Agency Recommandations: • Provide a copy of the most recent Water Quality Certificate and any subsequent amendments, including the date(s) of issuance. If more than 10 years old provide documentation that the certificate terms and conditions remain valid and in effect for the facility (e.g., a letter or e-mail from the agency). • Identify any other agency recommendations related to water quality and explain their scientific or technical basis • Describe all compliance activities related to water quality and any agency recommendations for the facility , including on-going monitoring, and how those are integrated into facility operations.

See response above for Zone 1.

Table III.B.3 Water Quality: Talcville Project Zone 3

Criterion	*Standard*	*Instructions*
B	2	Agency Recommandations: • Provide a copy of the most recent Water Quality Certificate and any subsequent amendments, including the date(s) of issuance. If more than 10 years old provide documentation that the certificate terms and conditions remain valid and in effect for the facility (e.g., a letter or e-mail from the agency). • Identify any other agency recommendations related to water quality and explain their scientific or technical basis • Describe all compliance activities related to water quality and any agency recommendations for the facility , including on-going monitoring, and how those are integrated into facility operations.

See response above for Zone 1.

Information Required to Support Upstream Fish Passage Standards

Table III.C.1 Upstream Fish Passage: Talcville Project Zone 1

Criterion	*Standard*	*Instructions*
C	1	Not Applicable / De Minimis Effect: • Explain why the facility does not impose a barrier to upstream fish passage in the designated ZoE. Typically, impoundment zones will qualify for this standard since once above a dam and in an impoundment, there is no additional facility barrier to further upstream movement. • Document available fish distribution data and the lack of migratory fish species in the ZoE. • If migratory fish species have been extirpated from the area, explain why the facility is not or was not the cause of the extirpation.

There are no upstream fish passage barriers in Zone 1 because it is an impoundment. The 1983 WQC states “Current fisheries management objectives for this section of the Oswegatchie do not

require facilities for fish passage." NYSDEC was considering the potential restoration of anadromous salmonids in the Oswegatchie watershed, however, no further information has been provided.

There are no known anadromous fish species present in the Project area. The catadromous American eel historically occurred in the lower reaches of the Oswegatchie River. The downstream Ogdensburg Dam impedes this species' upstream migration and this species has been rare to nonexistent in recent collections. There are no migratory fish in the project area due to the presence of several downstream dams as well as natural falls that block upstream fish movement. Resident fisheries of the Oswegatchie River in the Project vicinity consist of a mix of warm and cool water species. In general, other species found in the Oswegatchie River are considered residents or historic residents of the river.

Fish species that have occurred in Zone 1 include: brook trout (*Salvenlinus fontinalis*), mooneye in the Hiodontidae family, and longnose sucker (*Catostomus catostomus*).

Brook Trout are native to the Oswegatchie River and have historically occurred in abundance (pre European settlement through the mid-1800s) in the upper sections of the river. Brook trout are scattered in small areas and isolated pockets within the middle reach of the river, including the upstream reach of the Project area (Carlson 1992a). They require clear, cold water (below 75º F) with good-quality habitat and are equally suited to stream or lake environments (Smith 1985). Brook trout will colonize very small headwater areas, beaver ponds, or midsized streams, and as they mature, they may move down into larger streams or into cold-water lakes (Werner 1980). Brook trout, the New York State Fish, are not currently listed as a candidate, threatened, or endangered species by the U.S. Fish and Wildlife Service (USFWS) or NYSDEC.

During the summer months, adult brook trout are usually found in isolated pockets where cold water springs can be found or in cold-water tributaries to the Oswegatchie River. In late summer and early fall, they begin to migrate up the larger streams into the smaller headwater streams and tributaries. They seek out spawning locations in pea-sized gravel beds in streams with cold, well-oxygenated water where upwelling from springs or groundwater occurs (Carlander 1969).

Spawning usually begins in mid-October and continues into December (Smith 1985). The length of the incubation period varies according to the temperature—at lower temperatures, the incubation period is longer. In 35ºF water, the incubation period is about 144 days; in 50ºF water, the incubation is only 44 days (Carlander 1969). This variable incubation period allows the eggs to hatch in March and April (when food for the larvae becomes abundant) independent of when the eggs are laid. Fry emerge from the gravel and remain in the redd area while Section 1 Introduction 17 consuming their yolk, then move to shallow water with overhead cover where they can find protection from predators and begin to convert to a diet of crustaceans and aquatic invertebrates (Werner 1980).

Brook trout are opportunistic. As tiny fry the species feed mainly on microscopic crustaceans and then later on small insect larvae. As they grow, brook trout switch to mid-sized aquatic and

terrestrial insect larvae and small fish. Larger adults feed mainly on small forage fish. Habitat in the Talcville Project area is limited due to naturally occurring substrate and water temperatures.

The distribution of **mooneye** includes the Hudson Bay Basin south through the Great Lakes (except Lake Superior), the St. Lawrence River, and Lake Champlain drainage (NYSDEC 2009). NYSDEC listed this species as threatened due to severe declines in population numbers and Section 8 Discussion and Conclusions 138 distribution range. While the exact cause of their population decline are not known, siltation and competition with introduced species are possible factors (NYSDEC 2009). Recent abundance appears to be increasing in some areas, including the section of the Oswegatchie near Heuvelton and Black Lake (NYSDEC 2005). The goal for recovery of mooneye, as stated in the CWCS, is to establish self-sustaining populations throughout its historic range in the NE Lake Ontario-St. Lawrence, Lake Erie, Allegany, and Lake Champlain watersheds (NYSDEC 2005). Recommended actions include restoration of spawning areas in streams similar to that done for walleye and population monitoring. This species prefers clear water habitat of large streams, low and moderate gradient rivers, and deep and shallow sections of lakes (NatureServe 2009; NYSDEC 2009). Adults and juveniles prey mainly on aquatic and terrestrial insects and also crustaceans, mollusks, and small fishes (NatureServe 2009; NYSDEC 2009). The mooneye is a medium-size freshwater fish that reaches 11 to 15 inches in length and 1 to 2 pounds in weight (NYSDEC 2009). Males typically reach sexual maturity in 3 years, and females often do not reach sexual maturity until 5 years (NatureServe 2009). Spawning occurs during the spring, when sexually mature adults migrate into medium- to large-size rivers from March through May to deposit eggs (NYSDEC 2009; NatureServe 2009). Eggs are usually deposited over rocks in swift water areas (NYSDEC 2009), and most larvae are collected from near-surface waters at night (NatureServe 2009). Mooneye were captured during the spring and summer events for the 2009 Oswegatchie fish survey. A total of nine mooneye were captured from both Heuvelton and Eel Weir developments. The three mooneye captured in the Heuvelton impoundment were from daytime gillnet sets during the summer, and ranged in size from 354 to 390 mm. One mooneye was alive and released immediately. The two dead mooneye were kept on ice, later frozen, and sent to NYSDEC. Mooneye captured in the Heuvelton tailrace were from spring and summer boat electrofishing, with two individuals captured per season. The two mooneye captured during the spring in Heuvelton tailrace were not measured. One individual was alive and released immediately and the dead mooneye was kept on ice, later frozen, and sent the New York State Museum by recommendation from Doug Carlson of the NYSDEC. The two mooneye captured Section 8 Discussion and Conclusions 139 during the summer in Heuvelton tailrace measured 210 and 256 mm and were released alive. One mooneye was captured in the Eel Weir impoundment during the spring boat electrofishing. This individual was not measured and released immediately. One mooneye was captured in the Eel Weir tailrace during the summer boat electrofishing. This individual measured 320 millimeters and was released alive.

On June 1, 2010, the NYSDEC sent a letter to Erie Boulevard Hydropower, LP, owner of the Oswegatchie River Hydroelectric Project (P-2713) (Oswegatchie Project), regarding the Draft Fisheries Study Report for the Oswegatchie Project. The letter states “Other migratory fishes like

mooneye, lake sturgeon, silver lamprey, burbot and channel catfish are found both above and below Heuvelton Dam, but their populations and community interactions are likely compromised from the barriers restricting fish movement." Additionally, the letter states "One of the few (and somewhat) migratory species in the 4Cears of stewardship 1970-2010 -2 middle river segment is longnose sucker, and it appears to have disappeared since the 1980s. It is not clear whether barriers to its movement have been responsible for its population becoming diminished, or some other factor such as dissolved metal toxicity and acid rain."

Table III.C.2 Upstream Fish Passage: Talcville Project Zone 2

Criterion	*Standard*	*Instructions*
C	1	Not Applicable / De Minimis Effect: • Explain why the facility does not impose a barrier to upstream fish passage in the designated ZoE. Typically, impoundment zones will qualify for this standard since once above a dam and in an impoundment, there is no additional facility barrier to further upstream movement. • Document available fish distribution data and the lack of migratory fish species in the ZoE. • If migratory fish species have been extirpated from the area, explain why the facility is not or was not the cause of the extirpation.

Zone 2 is the bypassed reach. There are no known anadromous fish species present in the Project area. The catadromous American eel historically occurred in the river; however, the downstream Ogdensburg Dam impedes this species' upstream migration and this species has been rare to nonexistent in recent collections. In general, other species found in the Oswegatchie River are considered residents or historic residents of the river.

See response for Zone 1 above.

Table III.C.3 Upstream Fish Passage: Talcville Project Zone 3

Criterion	*Standard*	*Instructions*
C	1	Not Applicable / De Minimis Effect: • Explain why the facility does not impose a barrier to upstream fish passage in the designated ZoE. Typically, impoundment zones will qualify for this standard since once above a dam and in an impoundment, there is no additional facility barrier to further upstream movement. • Document available fish distribution data and the lack of migratory fish species in the ZoE. • If migratory fish species have been extirpated from the area, explain why the facility is not or was not the cause of the extirpation.

Zone 3 is the downstream reach. There are no known anadromous fish species present in the Project area. The catadromous American eel historically occurred in the river; however, the downstream Ogdensburg Dam impedes this species' upstream migration and this species has been rare to nonexistent in recent collections. In general, other species found in the Oswegatchie River are considered residents or historic residents of the river.

See response for Zone 1 above.

Information Required to Support Downstream Fish Passage Standards

Table III.D.1 Downstream Fish Passage: Talcville Project Zone 1

Criterion	*Standard*	*Instructions*
D	1	Not Applicable / De Minimis Effect: • Explain why the facility does not impose a barrier to downstream fish passage in the designated ZoE, considering both physical obstruction and increased mortality relative to natural downstream movement (e.g., entrainment into hydropower turbines). Typically, tailwater/downstream zones will qualify for this standard since below a dam and powerhouse there is no additional facility barrier to further downstream movement. Bypassed reach zones must demonstrate that flows in the reach are adequate to support safe, effective, and timely downstream migration. • For riverine fish populations that are known to move downstream, explain why the facility in the designated ZoE does not contribute adversely to the species populations or to their access to habitat necessary for successful completion of their life cycles; or • Document available fish distribution data and the lack of fish species requiring passage in the ZoE; or • If migratory fish species have been extirpated from the area, explain why the facility is not or was not the cause of the extirpation.

The catadromous American eel and other migratory species as discussed in the section on Upstream Fish Passage have historically occurred in the river; however, migratory species have been rare to nonexistent in recent collections.

A fisheries study was conducted in 2009 as part of the Oswegatchie Project relicensing process along the Oswegatchie River, including at the Oswegatchie Development, upstream of the Talcville Project. During the study, three areas of the Oswegatchie Development were sampled, including a bypassed reach, tailrace, and downstream reach. Angling efforts in the tailrace did not collect any fish. Species caught in the bypassed and downstream reaches include smallmouth bass (*Micropterus dolomieu*), rock bass (*Ambloplites rupestris*), and cutlips minnow (*Exoglossum maxillingua*). Other species identified in the Oswegatchie River include Banded killifish (*undulus diaphanus*) black crappie (*Pomoxis* nigromaculatus), blackknose dace (*Rhinichthys atratulus*), bluntnose minnow (*Pimephales notatus*), bluegill (*Lepomis macrochirus*), brown bullhead (*Ameiurus nebulosus*), brook trout (*Salvelinus fontinalis*), central mudminnow (*Umbra limi*), channel catfish (*Ictalurus punctatus*) fallfish (*Semotilus corporalis*), golden shiner (*Notemigonus crysoleucas*) largemouth bass (*Micropterus salmoides*), northern pike (*Esox lucius*), pumpkinseed (*Lepomis gibbosus*), shiner sp. (*Notropis sp.*), walleye (*Sander vitreus*), white pucker (*Catostomus commersoni*), and yellow perch (*Perca flavescens*).

Oswegatchie River Environmental Assessment:
https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=12794248

Table III.D.2 Downstream Fish Passage: Talcville Project Zone 2

Criterion	*Standard*	*Instructions*
D	1	Not Applicable / De Minimis Effect: • Explain why the facility does not impose a barrier to downstream fish passage in the designated ZoE, considering both physical obstruction and increased mortality relative to natural downstream movement (e.g., entrainment into hydropower turbines). Typically, tailwater/downstream zones will qualify for this standard since below a dam and powerhouse there is no additional facility barrier to further downstream movement. Bypassed reach zones must demonstrate that flows in the reach are adequate to support safe, effective, and timely downstream migration. • For riverine fish populations that are known to move downstream, explain why the facility in the designated ZoE does not contribute adversely to the species populations or to their access to habitat necessary for successful completion of their life cycles; or • Document available fish distribution data and the lack of fish species requiring passage in the ZoE; or • If migratory fish species have been extirpated from the area, explain why the facility is not or was not the cause of the extirpation.

Zone 2 is the bypassed reach below Talcville Dam. No barriers to further downstream movement exist in this bypassed reach.

See response to Zone 1 above.

Table III.D.3 Downstream Fish Passage: Talcville Project Zone 3

Criterion	*Standard*	*Instructions*
D	1	Not Applicable / De Minimis Effect: • Explain why the facility does not impose a barrier to downstream fish passage in the designated ZoE, considering both physical obstruction and increased mortality relative to natural downstream movement (e.g., entrainment into hydropower turbines). Typically, tailwater/downstream zones will qualify for this standard since below a dam and powerhouse there is no additional facility barrier to further downstream movement. Bypassed reach zones must demonstrate that flows in the reach are adequate to support safe, effective, and timely downstream migration. • For riverine fish populations that are known to move downstream, explain why the facility in the designated ZoE does not contribute adversely to the species populations or to their access to habitat necessary for successful completion of their life cycles; or • Document available fish distribution data and the lack of fish species requiring passage in the ZoE; or • If migratory fish species have been extirpated from the area, explain why the facility is not or was not the cause of the extirpation.

Zone 3 is the downstream reach below Talcville Dam. No barriers to further downstream movement exist in this downstream reach.

See response to Zone 1 above.

Information Required to Support Shoreline and Watershed Protection Standards

Table III.E.1 Shoreline and Watershed Protection: Talcville Project Zone 1

Criterion	*Standard*	*Instructions*
E	1	Not Applicable / De Minimis Effect: • If there are no lands with significant ecological value associated with the designated ZoE, document and justify this (e.g., describe the land use and land cover within the FERC project or facility boundary, and absence of critical habitat for protected species). • Document that there have been no Shoreline Management Plans or similar protection requirements for the facility.

The area around the project is mostly forested with some rural development on the northern shoreline of the impoundment and near Talcville Road. Based on information received from the New York Natural Heritage Program (NYNHP) on January 27, 2025 and the U.S. Fish and Wildlife Service (USFWS)'s New York Ecological Services Field Office on January 24, 2025, there is no critical habitat for protected species in the Project area.

The NYSDEC WQC states that there are no significant habitats associated with Zone 1, or anywhere in the Project area. The WQC states "[Brookfield] will not change the level of the reservoir and because the project is to be operated in a run-of-river mode with no storage and release, no effect is anticipated on wetlands either above the dam or below the tailrace."

The lands within the Project area are limited to those required for Project operations. The Project's run-of- river operation provide protection for the Project's shoreline areas and minimizes shoreline erosion .

The Project does not have a shoreline management plan or policy and Erie does not maintain a buffer zone around the Project impoundment. None of these provisions were prescribed within the Exemption Order or WQC.

Table III.E.2 Shoreline and Watershed Protection: Talcville Project Zone 2

Criterion	*Standard*	*Instructions*
E	1	Not Applicable / De Minimis Effect: • If there are no lands with significant ecological value associated with the designated ZoE, document and justify this (e.g., describe the land use and land cover within the FERC project or facility boundary, and absence of critical habitat for protected species). • Document that there have been no Shoreline Management Plans or similar protection requirements for the facility.

See response above for Zone 1.

Table III.E.3 Shoreline and Watershed Protection: Talcville Project Zone 3

Criterion	*Standard*	*Instructions*
E	1	Not Applicable / De Minimis Effect: • If there are no lands with significant ecological value associated with the designated ZoE, document and justify this (e.g., describe the land use and land cover within the FERC project or facility boundary, and absence of critical habitat for protected species). • Document that there have been no Shoreline Management Plans or similar protection requirements for the facility.

See response above for Zone 1.

Information Required to Support Threatened and Endangered Species Standards

Table III.F.1 Threatened and Endangered Species: Talcville Project Zone 1

Criterion	*Standard*	*Instructions*
F	3	Recovery Plan and Action: • If listed species are present, document that the facility is in compliance with relevant conditions in the species recovery plans, incidental take permits or statements, biological opinions, habitat conservation plans or similar government documents. • Document the any incidental take permits and/or biological opinions currently in effect were designated as long-term solutions for protection of listed species in the facility area.

Based on information received from the New York Natural Heritage Program (NYNHP) on January 27, 2025, there are no rare, threatened or endangered species, or significant habitat within the project area. Consultation provided by the NYNHP can be found in Appendix D.

Based on information received from the U.S. Fish and Wildlife Service (USFWS)'s New York Ecological Services Field Office on January 24, 2025, regarding a request for information on rare, threatened or endangered (RTE) species it appears that the following species may be present in the Project area:

- Northern Long-eared Bat (*Myotis septentrionalis*) – Threatened
- Monarch Butterfly (*Danaus Plexippus*) – Proposed Threatened
- Suckley's Cuckoo Bumble Bee (*Bombus suckleyi*) – Proposed Endangered

No critical habitats were identified within the project area were identified.

An updated request on RTE species was received from the USFWS's New York Ecological Services Field Office on June 4, 2025. The Suckley's Cuckoo Bumble Bee is no longer listed as an RTE species in the vicinity of the Talcville Project.

The USFWS has not adopted a formal recovery plan for the northern long-eared bat. On November 29, 2022, the USFWS published the final rule identifying prohibitions for the protection of northern long-eared bats. Operations of the Talcville Project adhere to the prohibitions outlined in the final rule.

The USFWS proposed rule for Monarch Butterfly and Designation of Critical Habitat on December 12, 2024. The proposed critical habitat is limited to coastal areas in southern California. The Monarch Butterfly requires habitat with milkweed as a larval host plant and floral nectar sources for adults. Migratory monarchs in North America also use overwintering habitat, where the adults cluster on trees. There are no Section 7 requirements under the Endangered Species Act (ESA) for this candidate species but opportunities to protect the species is encouraged (USFWS 2022b), including

- Current run-of-river operations do not have an adverse impact on monarch butterflies and their applicable milkweed habitats.
- Routine vegetation maintenance may impact milkweed and nectar resources in a limited area. The Project does not use pesticides at the facility, and only uses herbicides periodically, avoiding identified common milkweed and milkweed habitat.

Most migratory birds in the United States are protected under the Migratory Bird Treaty Act, protecting them from international trade. All wild birds in the state of New York are protected birds, meaning they are protected from hunting, unless they are designated game species. Species of special concern have additional protections that do not apply to all birds.

The following avian species have been observed near the Project area in the "Edwards CE" block of the Breeding Bird Atlas which encompasses the Project area.

- Osprey (*Pandion haliaetus*) – Protected under Migratory Bird Treaty Act (MBTA); protected bird of special concern (SC)
- Belted Kingfisher (*Megaceryle alcyon*) –MBTA; protected bird (PB)
- Mallard (*Anas platyrhynchos*) – MBTA; PB and game species (GS)
- Wood Duck (Aix sponsa) MBTA; PB-GS
- Common Loon (*Gavia immer*) MBTA; PB-SC

An avian species of special concern, the common loon has great difficulty walking on land, and must nest right at the water's edge where their reproductive success is susceptible to water level

changes. Loons also prefer protection from prevailing winds and waves, overhead vegetation or lateral cover, and a wide viewing angle of their territory. A common loon was observed flying overhead on the Edwards Nature Trail in the "Edwards CE" block of the Breeding Bird Atlas on July 12, 2024.

A second avian species of special concern is the osprey, which feeds primarily on live fish and tends to nest near bodies of water, preferring high, isolated nesting sites that provide unobstructed views, such as rock outcroppings, trees, or utility poles. An osprey was documented in the "Edwards CE" block of the Breeding Bird Atlas on April 30, 2024.

During the license exemption process, FERC staff and the NYSDEC concluded that Project operation is not likely to affect federally listed threatened or endangered species. Furthermore, According to the WQC, there are no endangered species or significant habitats that would be affected by operation of this Project. There are no specific additional requirements for threatened or endangered species protection in the FERC Order for License Exemption for the Talcville Project. There are no critical habitats for any RTE species located within the Talcville Project area.

The record of RTE consultation is included in Appendix D.

Table III.F.2 Threatened and Endangered Species: Talcville Project Zone 2

Criterion	*Standard*	*Instructions*
F	3	Recovery Plan and Action: • If listed species are present, document that the facility is in compliance with relevant conditions in the species recovery plans, incidental take permits or statements, biological opinions, habitat conservation plans or similar government documents. • Document the any incidental take permits and/or biological opinions currently in effect were designated as long-term solutions for protection of listed species in the facility area.

See response above for Zone 1.

Table III.F.3 Threatened and Endangered Species: Talcville Project Zone 3

Criterion	*Standard*	*Instructions*
F	3	Recovery Plan and Action: • If listed species are present, document that the facility is in compliance with relevant conditions in the species recovery plans, incidental take permits or statements, biological opinions, habitat conservation plans or similar government documents. • Document the any incidental take permits and/or biological opinions currently in effect were designated as long-term solutions for protection of listed species in the facility area.

See response above for Zone 1.

Information Required to Support Cultural and Historic Resources Standards

Table III.G.1 Cultural and Historic Resources: Talcville Project Zone 1

Criterion	*Standard*	*Instructions*
G	1	Not Applicable / De Minimis Effect • Document that there are no cultural or historic resources located on facility lands associated with the designated ZoE that can be affected by construction or operations of the facility; or • Document that the facility construction and operation have not in the past, nor currently adversely affect any cultural or historic resources that are present on facility lands in the designated ZoE; and • Provide a letter from the state and tribal (if applicable) historic preservation office the confirms no effect (this may be newly obtained or issued during prior FERC licensing or exemption proceedings).

A search of New York State Cultural Resource Information System (NYSCRIS) database indicated that there are no known historic or archaeological resources within the Project boundaries. One historic archaeological resource, the IGTS 034A-4-1 Site (USN 08908.000008) is located approximately 204 m (668 ft) southeast of the Project area. No previous architectural or archaeological surveys were conducted within the Project area.

Table III.G.2 Cultural and Historic Resources: Talcville Zone 2

Criterion	*Standard*	*Instructions*
G	1	Not Applicable / De Minimis Effect • Document that there are no cultural or historic resources located on facility lands associated with the designated ZoE that can be affected by construction or operations of the facility; or • Document that the facility construction and operation have not in the past, nor currently adversely affect any cultural or historic resources that are present on facility lands in the designated ZoE; and • Provide a letter from the state and tribal (if applicable) historic preservation office the confirms no effect (this may be newly obtained or issued during prior FERC licensing or exemption proceedings).

See above response for Zone 1.

Table III.G.3 Cultural and Historic Resources: Talcville Zone 3

Criterion	*Standard*	*Instructions*
G	1	Not Applicable / De Minimis Effect • Document that there are no cultural or historic resources located on facility lands associated with the designated ZoE that can be affected by construction or operations of the facility; or • Document that the facility construction and operation have not in the past, nor currently adversely affect any cultural or historic resources that are present on facility lands in the designated ZoE; and

Criterion	*Standard*	*Instructions*
		• Provide a letter from the state and tribal (if applicable) historic preservation office the confirms no effect (this may be newly obtained or issued during prior FERC licensing or exemption proceedings).

See above response for Zone 1.

Information Required to Support Recreational Resources Standards

Table III.H.1 Recreational Resources: Talcville Project Zone 1

Criterion	*Standard*	*Instructions*
H	1	Not Applicable / De Minimis Effect: • Document that the facility does not occupy lands or waters in the designated ZoE to which public access can be granted and the facility does not otherwise impact recreation opportunities in the facility area.

Zone 1 is the impoundment. In the WQC, the NYSDEC recommended the FERC require the Licensee to i) maintain access to the Project area for shoreline public fishing; and ii) consult with the regional DEC fisheries management staff regarding design and construction of a parking and boat launch facility to be built and maintained by the applicant as part of project costs. However, the FERC exemption issued June 16, 1983 did not require such facilities. Public access is permitted along shorelines within Project lands. However, public access is restricted around the dam, intake, and powerhouse due to public safety considerations. Additionally, there is no public land provided within the ZoE. There is no recreation plan or recreational facilities in place for this Project.

Table III.H.2 Recreational Resources: Talcville Project Zone 2

Criterion	*Standard*	*Instructions*
H	1	Not Applicable / De Minimis Effect: • Document that the facility does not occupy lands or waters in the designated ZoE to which public access can be granted and the facility does not otherwise impact recreation opportunities in the facility area.

See response above for Zone 1.

Table III.H.3 Recreational Resources: Talcville Project Zone 3

Criterion	*Standard*	*Instructions*
H	1	Not Applicable / De Minimis Effect: • Document that the facility does not occupy lands or waters in the designated ZoE to which public access can be granted and the facility does not otherwise impact recreation opportunities in the facility area.

See response above for Zone 1.

References

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Werner, R.G. 1980. Freshwater Fishes of New York: A Field Guide. Syracuse University Press. Syracuse, New York. 186 pp.

PART IV. ATTESTATION AND WAIVER FORM

ATTESTATION

As an Authorized Representative of Erie Boulevard Hydropower, L.P, the Undersigned attests that the material presented in the application is true and complete.

The Undersigned acknowledges that the primary goal of the Low Impact Hydropower Institute's certification program is public benefit, and that the LIHI Governing Board and its agents are not responsible for financial or other private consequences of its certification decisions.

The Undersigned further acknowledges that if LIHI Certification of the applying facility is granted, the LIHI Certification Mark License Agreement must be executed prior to the final certification decision and prior to marketing the electricity product as LIHI Certified® (which includes selling RECs in a market that requires LIHI Certification).

The Undersigned further agrees to hold the Low Impact Hydropower Institute, the Governing Board, and its agents harmless for any decision rendered on this or other applications, from any consequences of disclosing or publishing any submitted certification application materials to the public, or on any other action pursuant to the Low Impact Hydropower Institute's certification program.

Authorized Representative:

Name: Timothy Parker

Title: Compliance Manager

Authorized Signature: _____

Date: _____

PART V. CONTACTS

Table V-1. Applicant-related contacts

Facility Owner:	
Name and Title	
Company	Erie Boulevard Hydropower, L.P., a subsidiary of Brookfield Renewable
Phone	
Email Address	
Mailing Address	399 Big Bay Road, Queensbury, NY 12804
Facility Operator (if different from Owner):	
Name and Title	
Company	
Phone	
Email Address	
Mailing Address	
Consulting Firm / Agent for LIHI Program (if different from above):	
Name and Title	
Company	
Phone	
Email Address	
Mailing Address	
Compliance Contact (responsible for LIHI Program requirements):	
Name and Title	Timothy Parker, Compliance Manager
Company	Brookfield Renewable
Phone	315-267-1010
Email Address	Timothy.Parker@brookfieldrenewable.com
Mailing Address	184 Elm Street, Potsdam, NY 13676
Party responsible for accounts payable:	
Name and Title	
Company	Brookfield Renewable
Phone	
Email Address	AP@brookfieldrenewable.com
Mailing Address	41 Victoria, Gatineau, QC J8X 2A1
Name and Title	Sandeep Mascarenhas, Senior Analyst, Capacity & Ancillary Services Management
Company	Brookfield Renewable
Phone	819-561-2722 ext. 6743
Email Address	Sandeep.Mascarenhas@brookfieldrenewable.com
Mailing Address	41 Victoria, Gatineau, QC J8X 2A1

Table V-2. Current relevant state, federal, and tribal resource agency contacts (excluding FERC).

Agency Contact		***Area of Responsibility (check applicable boxes)***
Agency Name	New York State Department of Environmental Conservation	☒ Flows ☒ Water Quality ☒ Fish/Wildlife ☐ Watershed ☐ T&E Species ☐ Cultural/Historic ☒ Recreation
Name and Title	Patrick Rahm, Environmental Analyst, Division of Environmental Permits	
Phone	518-402-6594	
Email address	patrick.rahm@dec.ny.go	
Mailing Address	625 Broadway, Albany, NY 12233-4757	

Agency Contact		***Area of Responsibility (check applicable boxes)***
Agency Name	New York State Department of Environmental Conservation	☐ Flows ☐ Water Quality ☐ Fish/Wildlife ☐ Watershed ☒ T&E Species ☐ Cultural/Historic ☐ Recreation
Name and Title	Nicholas Conrad, Information Resources Coordinator	
Phone	518-402-8935	
Email address	Nick.Conrad@dec.ny.gov	
Mailing Address	625 Broadway, Albany, NY 12233-4757	

Agency Contact		***Area of Responsibility (check applicable boxes)***
Agency Name	U.S. Fish and Wildlife Service	☐ Flows ☐ Water Quality ☐ Fish/Wildlife ☐ Watershed ☒ T&E Species ☐ Cultural/Historic ☐ Recreation
Name and Title	Steve Kendrot, Deputy Field Supervisor	
Phone	607-526-0559	
Email address	FW5es-nyfo@fws.gov	
Mailing Address	3817 Luker Road, Cortland, NY 13045	

Agency Contact		***Area of Responsibility (check applicable boxes)***
Agency Name	U.S. Fish and Wildlife Service	☒ Flows ☒ Water Quality ☒ Fish/Wildlife ☐ Watershed ☒ T&E Species ☐ Cultural/Historic ☐ Recreation
Name and Title	John Wiley, Field Biologist	
Phone	607-753-9334	
Email address	john_wiley@fws.gov	
Mailing Address	3817 Luker Road, Cortland, NY 13045	

Agency Contact		***Area of Responsibility (check applicable boxes)***
Agency Name	New York State Parks, Recreation & Historic Preservation Division for Historic Preservation	☐ Flows ☐ Water Quality ☐ Fish/Wildlife ☐ Watershed ☐ T&E Species ☒ Cultural/Historic ☐ Recreation
Name and Title	Nancy Herter, Ph.D., Director, Technical Preservation Services Bureau	
Phone	(518) 268-2179	
Email address	nancy.herter@parks.ny.gov	
Mailing Address	PO Box 189, Peebles Island, Waterford, New York 12188-0189	

Table V-3. Current engaged stakeholder and tribal contacts.

Stakeholder Contact		***Area of Responsibility (check applicable boxes)***
Organization Name	Click or tap here to enter text.	☐ Flows ☐ Water Quality ☐ Fish/Wildlife ☐ Watershed ☐ T&E Species ☐ Cultural/Historic ☐ Recreation
Name and Title	Click or tap here to enter text.	
Phone	Click or tap here to enter text.	
Email address	Click or tap here to enter text.	
Mailing Address	Click or tap here to enter text.	

Stakeholder Contact		***Area of Responsibility (check applicable boxes)***
Organization Name	Click or tap here to enter text.	☐ Flows ☐ Water Quality ☐ Fish/Wildlife ☐ Watershed ☐ T&E Species ☐ Cultural/Historic ☐ Recreation
Name and Title	Click or tap here to enter text.	
Phone	Click or tap here to enter text.	
Email address	Click or tap here to enter text.	
Mailing Address	Click or tap here to enter text.	

APPENDIX A

TALCVILLE HYDROELECTIC PROJECT ZONES OF EFFECT

ZONES OF EFFECT

TALCVILLE HYDROELECTRIC PROJECT

APPENDIX B
PHOTOS OF KEY PROJECT FEATURES

Photo 1: Headpond

Photo 2: Spillway

Photo 3: Spillway

Photo 4: Spillway

Photo 5: Bypass

Photo 6: Intake and Powerhouse

Photo 7: Trash Gate

Photo 8: Trashracks

Photo 9: Powerhouse

Photo 10: Powerhouse and Tailrace

Photo 11: Tailrace

APPENDIX C
PROJECT AERIAL

Source: ConnectExplorer

APPENDIX D
401 WATER QUALITY CERTIFICATION CONSULTATION

Brookfield
Renewable U.S.

January 23, 2025

Submitted Electronically Only

Mr. Patrick Rahm
New York State Department of Environmental Conservation
625 Broadway
Albany, 12233

Subject: **Talcville Project (FERC No.4402)**
Low Impact Hydropower Institute Certification
Water Quality Certificate Verification

Dear Mr. Rahm:

Erie Boulevard Hydropower, L.P. (Erie) is applying for Low Impact Hydropower Institute (LIHI) certification for the Talcville Project (FERC No. 4402). This Project is located on the Oswegatchie River in the Town of Edwards, St. Lawrence County, NY. The Project was issued an Order Granting Exemption from Licensing by the Federal Energy Regulatory Commission (FERC) on June 16, 1983.

The Talcville Project operates under the Water Quality Certificate (WQC) issued by the New York State Department of Environmental Conservation (NYSDEC) and the FERC Exemption issued on May 5, 1983 and June 16, 1983, respectively. The facility is operated in run-of-river mode. Attached is the WQC dated May 5, 1983.

As part of the LIHI certification process, Erie must consult with NYSDEC to confirm that the terms and conditions set forth in the WQC are still valid and in effect. Erie is requesting confirmation from the NYSDEC stating that the WQC issued for the operation of Talcville Project on May 5, 1983 is still in effect for the facility. Please provide this confirmation by reply to this letter via letter or email.

Erie would appreciate a response within 30 days of the date of this letter. Thank you in advance for your assistance, and if you have any questions, please do not hesitate to contact me at Timothy.Parker@brookfieldrenewable.com or (315) 267-1020 with any questions or concerns.

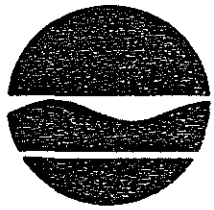
Respectfully submitted,

Timothy Parker
Compliance Manager
New York and Minnesota

Enclosures: 1

ERIE BOULEVARD HYDROPOWER, L.P.
184 Elm Street, Potsdam, NY 13676
T + 1 315.267.1020 F +1 315.742.1165 brookfieldrenewableUS.com

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233



Henry G. Williams
Commissioner

May 5, 1983

The Honorable Kenneth F. Plumb
Secretary
Federal Energy Regulatory Commission
825 North Capitol, NE
Washington, D.C. 20426

RE: COMMENTS -- FERC PROJECT #4402-001
Lawrence R. Taft Application for
Exemption from Licensing for the
Talcville Water Power Project on the
Oswegatchie River, Town of Edwards,
St. Lawrence County, New York

Dear Secretary Plumb:

The New York State Department of Environmental Conservation (DEC)* has reviewed the application of Lawrence R. Taft for exemption from licensing pursuant to Part 106 for the proposed Talcville Water Power Project located on the Oswegatchie River in the Town of Edwards, St. Lawrence County, New York.

DEC has no objection to the issuance of the requested exemption to Mr. Taft for the Talcville Project, with the provision that the proposed project will be constructed, operated and maintained in compliance with terms and conditions stated in the attachment to this letter. These terms and conditions have been established after consultation with the applicant and other interested parties, much of which is documented in the exemption application by Mr. Taft.

You or your staff may contact me at (518) 457-7418 if you have any questions concerning this letter or its attachment or any of DEC's regulatory review and permit requirements.

Very truly yours,

Fredd W Howell for

Murdock M. MacKenzie
Chief, Federal/State Coordination Section

MMM/FWH:dh

*Division of Regulatory Affairs
Division of Fish and Wildlife
Division of Lands and Forests
Division of Water

cc (w/att.): L. R. Anderson (FERC)
F. Springer (FERC)
L. R. Taft

bcc (w/attach.): E. Miller (DRA)
D. Sheppard (F&W)
B. Zeisel (F&W)
L. Brown (End. Species)
A. Bromberg (Water Q.)
G. Koch (Dam Safety)
F. Dwyer (Flood Mgt.)
C. Morrison (L&F)
R. Vaas (Reg. 6) (2)
A. Smith, ATTN: L. Kuwik (SHPO)
R. Anderson, ATTN: R. Roberts (OPR)
B. Goodale (PSC)
P. Hamilton (USFWS)
J. Henry (COE-Buffalo)
A. N. Miller (EPA-NYC)

bcc (w/o attach.): J. Wilson (Reg. 6)
L. Concra (DRA)
F. Howell (DRA)
E. Horn (F&W)

TERMS AND CONDITIONS RELATED TO ISSUANCE OF PERMITS AND APPROVALS BY THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (DEC) FOR CONSTRUCTION, OPERATION AND MAINTENANCE OF A SMALL HYDROELECTRIC PROJECT AT TALCVILLE ON THE OSWEGATCHIE RIVER, TOWN OF EDWARDS, ST. LAWRENCE COUNTY, NEW YORK BY LAWRENCE R. TAFT UNDER FEDERAL ENERGY REGULATORY COMMISSION (FERC) PROJECT #4402-001 EXEMPTION FROM LICENSING

The New York State Department of Environmental Conservation has reviewed the application before the Federal Energy Regulatory Commission (FERC) for the above subject project (FERC #4402-001) pursuant to applicable provisions of the New York State Environmental Conservation Law (ECL) including Article 70 (Uniform Procedures Act), Article 8 (Environmental Quality Review Act), Article 15 Title 5 (Protection of Waters), Articles 11 and 13 (Fish and Wildlife Law), Article 9 Title 15 (Protected Plants) and Article 15 Title 27 (State Wild, Scenic and Recreational Rivers Act). Such review has been undertaken in accord with Section 30c of the Federal Power Act and Section 408 of the Federal Energy Security Act, taking into consideration the requirements of Section 401 of the Clean Water Act of 1977 (33 USC 1251 et seq) for water quality certification, of the Fish and Wildlife Coordination Act (16 USC 662) and Endangered Species Act (16 USC 1536) for consultation regarding mitigation and enhancement of fish and wildlife resources, and of the Federal Wild, Scenic and Recreational Rivers Act (16 USC 28) where applicable.

As a result of this review of the proposed project development, briefly described herein, the terms and conditions which should be met prior to issuance of applicable state permits and certifications are stated below. Such terms and conditions may also be incorporated by FERC as part of their conditions for exemption from licensing for this project.

PROJECT DEVELOPMENT

DEC understands the project will be as described in the Notice of Application for license exemption as published by FERC on March 10, 1983. The proposed project will include the following activities:

(i) reconstruction of the breached Talcville Dam;

(ii) renovation of an existing 250 KW generator; and

(iii) replacement of a second generator with new unit rated at 750 KW.

The project will also include a reservoir as described in the Notice of Application, a 135 foot long flume, a wood frame power house, a 1.5 MW 23,000-volt substation and appurtenant facilities.

APPLICABLE PERMITS AND APPROVALS

On the basis of the described project and proposed construction and operation techniques, the following state permits and approvals may be needed from DEC:

1. Water Quality Certification under Section 401 of the Clean Water Act of 1977 if a permit under Section 404 is required from the U.S. Army Corps of Engineers.

2. Stream Protection and Dam Permits under Article 15 Title 5, Protection of Waters.

3. Flood Plain Development Permit under N.Y. State Floodplain Management Regulations (6 NYCRR 500).

Upon further detailing or modification of construction methods or changes in proposed operations, additional DEC permits may be required or modification of permits already issued may be necessary. In addition, certain other federal, state or local government approvals and permits may be required. The applicant should consult with the appropriate agencies in advance of any construction activity.

TERMS AND CONDITIONS

1. Construction and Maintenance Activities

Impacts related to construction and maintenance of the proposed project (e.g. turbidity, pollution from wet concrete, etc.) will be addressed as conditions for applicable state permits as follows:

(i) The applicant will be required to have all sediments scheduled for removal from the Oswegatchie River analyzed for the presence of heavy metals and toxic substances prior to the initiation of construction or maintenance activities. All sediment shall be disposed of in a DEC-approved manner.

(ii) The applicant will be required to consult with DEC prior to initiating any action that will result in the interruption to downstream flows, including, in particular, cofferdams and their installation procedures, scheduling and duration.

(iii) The applicant will minimize the removal of vegetation associated with the construction and maintenance of the project facilities including related transmission lines.

(iv) The applicant will be required to consult with DEC on maintenance activities, both scheduled and unscheduled, and to obtain DEC approval.

2. Project Operation

The Oswegatchie River at Talcville is currently managed as a mixed cool-water/warmwater fishery. Species of particular interest include northern pike, smallmouth bass, bullheads, pickerel and yellow perch. In order to minimize adverse impacts to this fishery, both above and below the dam, as well as to the wildlife resources and habitats which may be influenced by operation of the project, the project will operate in a run-of-river mode.

(i) Run-of-river mode shall mean that the instantaneous outflow from the impoundment, consisting of flow through the turbines, leakage and directed releases, including spillage, will equal the instantaneous inflow to the impoundment.

(ii) A spillage or release of 100 cfs will be required to preserve habitat and maintain water quality within the 195 foot shunted section of the stream. As an alternative, the applicant may operate with a spillage or release in this section of 60 cfs, provided at applicant's cost, studies are undertaken in consultation with the Department of Environmental Conservation to assess the possible need for additional flows to maintain habitat in the shunted section. Additional flows shall then be provided as indicated by such studies.

(iii) The Department of Environmental Conservation reserves the right to require flow modifications and other alternations in operating mode to make the Talcville Project compatible with any future adjustments in flows resulting from operational changes at the several Niagara Mohawk Power Corporation facilities located upstream. As a condition to the issuance of a 401 Water Quality Certification for these Niagara Mohawk facilities by DEC on November 15, 1978, in conjunction with FERC Project #2713, studies have been required of Niagara Mohawk to determine the feasibility of providing minimum flows or seasonal flows in the Oswegatchie River for enhancement of fisheries, recreational uses, aesthetics and waste assimilative capacity. Subsequent modifications to flow regimes from the Niagara Mohawk facilities should be taken into account at all downstream hydropower facilities through concomitant beneficial flow changes, if warranted.

(iv) The applicant will operate the proposed development in a manner that will not contravene the established needs of other in-line consumptive and non-consumptive interests.

3. Water Quality

No adverse impacts upon the water quality standards of the Oswegatchie River have been identified with this project. However, DEC reserves the right to require the applicant to implement temporary emergency procedures, if required, to assure the protection of the quality of the water and its biota. DEC also reserves the right to require the applicant to prepare studies, if necessary, to determine the need to abate, within reason, any future impacts upon the water resource that can be directly attributed to the existence and operation of the project.

4. Fish Passage

Current fisheries management objectives for this section of the Oswegatchie do not require facilities for fish passage. However, the Department is currently evaluating the potential for restoration of anadromous salmonids in the Oswegatchie watershed. Therefore, DEC reserves the right to require the applicant to provide passage for fish migration both upstream and downstream, as part of the project cost, if such need is ever identified by the Department. The applicant should consult and cooperate with DEC in designing and operating such facilities should a need for them be established.

5. Endangered Species, Significant Habitats and Wetlands

DEC staff reviewed the available information and has found no endangered species or significant habitats that would be affected by development and operation of this project. Because the Department understands the applicant will not change the level of the reservoir and because the project is to be

operated in a run-of-river mode with no storage and release, no effect is anticipated on wetlands either above the dam or below the tailrace.

6. Dam Safety and Flood Management

Complete dam reconstruction will be necessary at this breached site, subject to current criteria for new dams. Details of such reconstruction including stability of the structure must be cleared with the DEC Dam Safety unit before a Dam Permit can be issued under Article 15 Title 5 (Protection of Waters).

No significant impacts from flooding are anticipated, but the project is located in a flood hazard area. The Town of Edwards is under New York State Floodplain Management Regulations (6 NYCRR 500) as part of the National Flood Insurance Program. Activities in this flood hazard area will require a flood plain development permit from DEC.

7. Recreational Uses

The application indicates on the third page of Exhibit E that there are no recreational uses of the project land and none are planned. This ignores public benefits from streamside fishing and the fishing potentials which could result from a small public parking lot and cartop boat launch. Therefore, consistent with public safety and safe plant operation, the license exemption should require the applicant (i) to maintain access to his property for shoreline public fishing; and (ii) to consult with the regional DEC fisheries management staff regarding design and construction of a parking and boat launch facility to be built and maintained by the applicant as part of project costs.

In addition, DEC supports the other public access and recreational facilities to be provided by the applicant, as suggested in correspondence from the New York State Office of Parks and Recreation (see letter of December 3, 1982 in agency correspondence in application).

May 5, 1983

Caley, Katherine

From: Rahm, Patrick J (DEC) <Patrick.Rahm@dec.ny.gov>
Sent: Friday, January 24, 2025 11:08 AM
To: Caley, Katherine; Brunner, Andrew K (DEC)
Cc: Timothy.Parker; Edgerton, Monica
Subject: RE: Talcville Hydroelectric Project (FERC No 4402) - Water Quality Certification Verification
Attachments: 20250123_ Talcville WQC Verification.pdf

Good afternoon Katherine,

NYSDEC appreciates the outreach for this verification. Since the Talcville Hydroelectric Project (P-4402) is and exempt hydrofaciltiy and NYSDEC's issued Section 401 Water Quality Certification (WQC) dated May 5, 1983 for this facility is coincident with the term of the exemption license, the WQC stands in perpetuity along with the exemption, so long as there are no FERC requested changes to the exemption license (i.e. request for full FERC license or project operational changes that would effect conditions to the exemption). This WQC is indeed still valid for this facility.

Thank you again for your confirmation request and we wish you good luck on your certification for your LIHI for this facility.

Thank you,

Patrick Rahm
Pronouns: He/Him/His
Environmental Analyst, Division of Environmental Permits

New York State Department of Environmental Conservation
625 Broadway, Albany, NY 12233
P: 518-402-6594 | patrick.rahm@dec.ny.gov
https://www.dec.ny.gov |

From: Caley, Katherine <Katherine.Caley@hdrinc.com>
Sent: Thursday, January 23, 2025 1:05 PM
To: Rahm, Patrick J (DEC) <Patrick.Rahm@dec.ny.gov>; Brunner, Andrew K (DEC) <Andrew.Brunner@dec.ny.gov>
Cc: Timothy.Parker <Timothy.Parker@brookfieldrenewable.com>; Edgerton, Monica <Monica.Edgerton@hdrinc.com>
Subject: Talcville Hydroelectric Project (FERC No 4402) - Water Quality Certification Verification

Good Afternoon,

Erie Boulevard Hydropower, L.P. is applying for Low Impact Hydropower Institute (LIHI) certification for the Talcville Project (FERC No. 4402). This Project is located on the Oswegatchie River in the Town of Edwards, St. Lawrence County, NY. The Talcville Project operates under the Water Quality Certificate issued by the NYSDEC and the FERC Exemption issued on May 5, 1983 and June 16, 1983, respectively. The facility is operated in run-of-river mode.

Consistent with LIHI Handbook, the applicant is required to verify that the Water Quality Certificate is still valid if it is more than 10 years old. On behalf of Erie Boulevard, I am submitting the attached request for confirmation from the NYSDEC stating that the 401 Water Quality Certificate issued for the operation of Talcville Project on May 5, 1983 is still in effect for the facility. A copy of the references Water Quality Certificate is included I the attached submission

Please let me know if you have any questions on the attached request. We respectfully request a response within 30 days of this letter to ensure a timely submittal of the certification application to LIHI.

Thank you,
Katherine

Katherine Caley, P.E. (NY)
Engineering Section Lead

HDR
231 Salina Meadows Parkway, Suite 210
Syracuse, NY 13212
D 315.414.2213 **M** 315.243.9183
Katherine.Caley@hdrinc.com

hdrinc.com/follow-us

APPENDIX E

RARE, THREATENED AND ENDANGERED SPECIES CONSULTATION

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New York Ecological Services Field Office
3817 Luker Road
Cortland, NY 13045-9385
Phone: (607) 753-9334 Fax: (607) 753-9699
Email Address: fw5es_nyfo@fws.gov
https://www.fws.gov/northeast/NYFO/

In Reply Refer To: 06/04/2025 19:34:14 UTC
Project Code: 2025-0046897
Project Name: Talcville LIHI Application

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the

human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. **Please include the Consultation Code in the**

header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New York Ecological Services Field Office
3817 Luker Road
Cortland, NY 13045-9385
(607) 753-9334

PROJECT SUMMARY

Project Code: 2025-0046897
Project Name: Talcville LIHI Application
Project Type: Dam - Operations
Project Description: The Talcville Project (FERC No. 4402) consists of one development located on the Oswegatchie River in the Town of Edwards, St. Lawrence County, New York. The Talcville Project is located at river mile 75.5 from the confluence with the St. Lawrence River. The Talcville Project is applying to the Low Impact Hydropower Institute (LIHI) for a certification of their Project, and is looking for information regarding rare, threatened or endangered species that may occur in the project area. LIHI requires documentation of a finding of no negative effects or documentation that the facility is in compliance with relevant conditions in the species recovery plans.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@44.310737,-75.29808748696436,14z

Counties: St. Lawrence County, New York

ENDANGERED SPECIES ACT SPECIES

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

---

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Monica Edgerton
Address: 231 Salina Meadows Pkwy
City: Syracuse
State: NY
Zip: 13212
Email monica.edgerton@hdrinc.com
Phone: 6802830665

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Fish and Wildlife, New York Heritage Program

625 Broadway, Fifth Floor, Albany, NY 12233-4757
Phone: (518) 402-8935 | Fax: (518) 402-8925
www.dec.ny.gov

01/27/2025

The attached report from the Environmental Resource Mapper includes information from the New York Natural Heritage Program database with respect to the location indicated on the map below. This letter, together with the attached report from the Environmental Resource Mapper, is equivalent to, and carries the same validity, as a letter from the New York Natural Heritage Program, including for projects where a Natural Heritage letter is required.

If your location of interest does not fall within an area covered by the Rare Plants and Rare Animals layer or in the Significant Natural Communities layer, then New York Natural Heritage has no records to report in the vicinity of your project site. Submitting a project screening request to NY Natural Heritage is not necessary.

If the attached report lists that your location of interest is in the vicinity of state-listed animals, including state-listed bats, please consult the **EAF Mapper** to obtain a list of the species involved. (You do not have to be filling out an Environmental Assessment Form in order to use the EAF Mapper). Then consult the appropriate **NYSDEC Regional Office** for information on any project requirements or permit conditions.

If the attached report lists unlisted animals, rare plants, or significant natural communities, and if you would like more information on these, please submit a project screening request to **New York Natural Heritage**. For more information, please see the DEC webpage **Request Natural Heritage Information for Project Screening**.

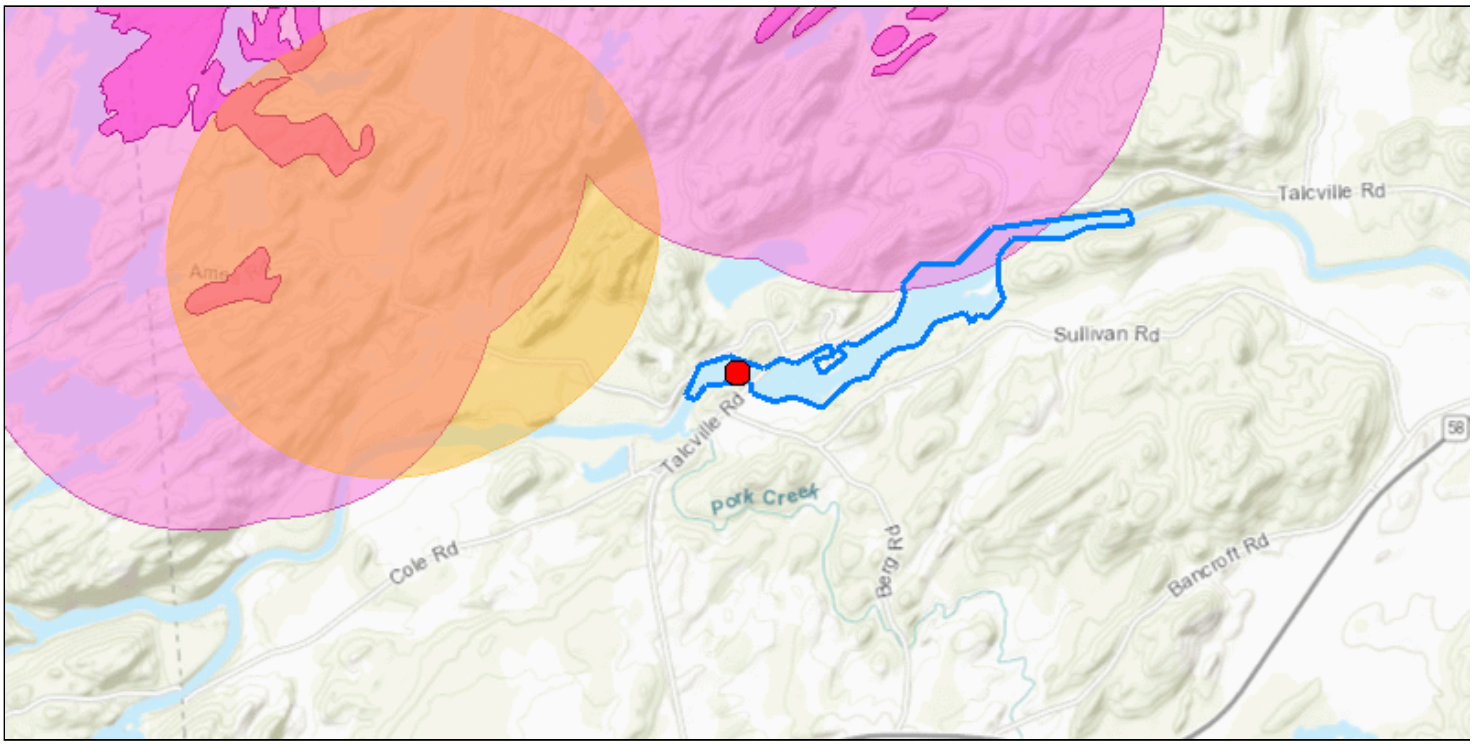
The absence of data does not necessarily mean that rare or state-listed species, significant natural communities, or other significant habitats do not exist on or adjacent to the proposed site. Rather, NYNHP files currently do not contain information that indicates their presence. For most sites, comprehensive field surveys have not been conducted. NYNHP cannot provide a definitive statement on the presence or absence of all rare or state-listed species or significant natural communities. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other resources may be required to fully assess impacts on biological resources from a proposed project.

This response applies only to known occurrences of rare or state-listed animals and plants, significant natural communities, and other significant habitats maintained in the NYNHP database.

New York Natural Heritage Program

https://www.nynhp.org/.

Environmental Resource Mapper



The coordinates of the point you clicked on are:

UTM 18	**Easting:**	475430.5942866038	**Northing:**	4906178.63245239
Longitude/Latitude	**Longitude:**	-75.30805309184923	**Latitude:**	44.30845765820179

The approximate address of the point you clicked on is:
227 Talcville Rd, Edwards, New York, 13635

County: St Lawrence
Town: Edwards
USGS Quad: EDWARDS

Waterbody Classifications for Rivers/Streams

Regulation: 910-1088
Standard: C
Classification: C

303D River and Stream Construction

Waterbody Name: Oswegatchie River, Middle, and mnr tribs
PWL ID: 0905-0113
Basin: Saint Lawrence River
Description: stream and select tribs, from Talcville to Newton Falls

National Wetands Inventory

Attribute: R2UBH
Type: Riverine
Acres: 56.39106798285623

For more information about the National Wetands Inventory wetlands visit **http://www.fws.gov/wetlands/**

If your project or action is within or near an area with a rare animal, a permit may be required if the species is listed as endangered or threatened and the department determines the action may be harmful to the species or its habitat.

If your project or action is within or near an area with rare plants and/or significant natural communities, the environmental impacts may need to be addressed.

The presence of a unique geological feature or landform near a project, unto itself, does not trigger a requirement for a NYS DEC permit. Readers are advised, however, that there is the chance that a unique feature may also show in another data layer (ie. a wetland) and thus be subject to permit jurisdiction.

Please refer to the "Need a Permit?" tab for permit information or other authorizations regarding these natural resources.

Disclaimer: If you are considering a project or action in, or near, a wetland or a stream, a NYS DEC permit may be required. The Environmental Resources Mapper does not show all natural resources which are regulated by NYS DEC, and for which permits from NYS DEC are required. For example, Regulated Tidal Wetlands, and Wild, Scenic, and Recreational Rivers, are currently not included on the maps.

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